

CLAIMS

What is claimed is:

1. A remote file system that promotes truth on a client, comprising:
one or more client computers that operatively communicate with an online remote location to work on one or more file objects;
a caching component that selectively caches the one or more file objects to a local cache located on a respective client computer, thereby making it available to the client when disconnected from remote location; and
a component that resolves conflicts between a client version of the one or file objects and a remote location version of the one or more file objects such that the client version overrides the remote location version when viewed on the client.
2. The system of claim 1, the component that resolves conflicts is based at least in part upon user preferences.
3. The system of claim 1, the component that resolves conflicts is based on a prioritization policy comprising an order of updating the file object.
4. The system of claim 1, the caching component pushes modifications made to the file object back to the remote location to update the remote location version on a periodic basis.
5. The system of claim 4, the periodic basis selected to maximize bandwidth usage and to mitigate potential data loss with respect to the client computer.
6. The system of claim 1, the conflicts resulting from more than one client modifying the file object.
7. The system of claim 1, the caching component writes a modified file object back to the remote location.

8. The system of claim 1, the caching component caches modified data and writes back to the remote location at one of the following events:
 - at least before a corresponding handle closes; and
 - the remote location revokes write buffering.
9. The system of claim 1, the caching component updates respective local caches when the file object is modified at the remote location while the respective client computers were disconnected from the remote location if local caches have not been updated while offline.
10. The system of claim 1, the caching component flushes out stale data from local caches based at least in part upon at least one of the following:
 - comparison of file signatures; and
 - comparison of file properties.
11. The system of claim 10, the file properties comprising time stamp, file size, and revision count.
12. The system of claim 1, the caching component trims the respective local caches based at least in part upon user preferences.
13. The system of claim 1, further comprising a viewing component that allows a merged directory view, the merged directory view comprising current files not in conflict, current files in conflict between the remote location and the client computer, and files that are newly generated on one of the client and remote location.
14. The system of claim 13, the viewing component facilitates a merged directory view when the client and remote location become connected once again to visualize changes made to file objects on the client and on the remote location during an offline period.

15. The system of claim 13, the newly generated files are not present on the client cache but are viewable by the client before the client cache is updated.

16. The system of claim 13, the viewing component employs one or more visual or graphical enhancements to facilitate visualization of online conflicted files, offline conflicted files and overlays of files.

17. The system of claim 16, overlays of files refers to overlaying client version of the file object over the remote location version of the file object to facilitate visualizing one or more changes made to the file object by at least one of the remote location and the client.

18. The system of claim 1, the caching component silently pushes file objects added by the client to the remote location.

19. The system of claim 1, further comprising a synchronization component that background synchronizes namespaces not in conflict between the client and the remote location.

20. The system of claim 1, the caching component triggers a corresponding directory change notification request whose physical share connection state has changed, to facilitate effectively enumerating any affected directory.

21. The system of claim 1, wherein creation of a new directory on a client is always satisfied.

22. The system of claim 1, the remote location comprises one or more servers.

23. A persistent caching method that facilitates truth on a client, comprising:
selectively caching one or more file objects from a remote server to at least one local cache located on at least one client computer while online;
transitioning to an offline state;
modifying a client-cached file object while offline; and
viewing a client version of the file if it conflicts with or newer than the server version.
24. The method of claim 23, further comprising resolving conflicts between the client version and the remote server version based at least in part upon user preferences.
25. The system of claim 23, further comprising resolving conflicts based at least in part on a prioritization policy comprising a priority order of updating the file object.
26. The method of claim 23, further comprising pushing modifications made to the file object back to the remote server to update the remote server version on a periodic basis.
27. The method of claim 26, the periodic basis selected to maximize bandwidth usage and to mitigate potential data loss.
28. The method of claim 23, the conflicts resulting from more than one client modifying the same file object.
29. The method of claim 23, further comprising writing a modified file object back to or overwrite the local cache with the server version based on user preferences.
30. The method of claim 23, the caching component writes back to the remote server at one of the following events:
at least before a corresponding handle closes; and
the remote location revokes write buffering.

31. The method of claim 23, updating respective local caches when the file object is modified at the remote location while the respective client computers were disconnected from the remote location.

32. The method of claim 1, flushing out stale data from local caches based at least in part upon at least one of the following:

comparison of file signatures; and

comparison of file properties, the file properties comprising time stamp, file size, and revision count..

33. The method of claim 23, trimming the respective local caches based at least in part upon user preferences.

34. The method of claim 23, further comprising viewing a merged directory view of file objects, the merged directory view comprising current files not in conflict, current files in conflict between the remote location and the client computer, and files that are newly generated on one of the client and remote location.

35. The method of claim 34, further comprising viewing a merged directory view when the client and remote location become connected once again to visualize changes made to file objects on the client and on the remote location during an offline period.

36. The method of claim 34, the newly generated files are not present on the client cache but are viewable by the client before the client cache is updated and the newly generated files are not present on the server but are viewable by client before the server is updated.

37. The method of claim 34, employing one or more visual or graphical enhancements to facilitate visualization of online conflicted files, offline conflicted files and overlays of files.

38. The method of claim 16, overlays of files refers to overlaying client version of the file object over the remote location version of the file object to facilitate visualizing one or more changes made to the file object by at least one of the remote location and the client.

39. The method of claim 23, the caching component silently pushes file objects added by the client to the remote location.

40. The method of claim 23, further comprising performing background synchronizations of namespaces not in conflict between the client and the remote location.

41. The method of claim 23, the caching component triggers a corresponding directory change notification request whose physical share connection state has changed, to facilitate effectively enumerating any affected directory.

42. A persistent caching method that facilitates truth on a client, comprising:
means for selectively caching one or more file objects from a remote server to at
means for least one local cache located on at least one client computer while
online;
means for transitioning to an offline state;
means for modifying a client-cached file object while offline; and
means for viewing a client version of the file if it conflicts with the remote server
version.

43. A data packet adapted to be transmitted between two or more computer processes facilitating extracting data from messages, the data packet comprising:

information associated with selectively caching one or more file objects from a
remote server to at least one local cache located on at least one client computer while
online, transitioning to an offline state, modifying a client-cached file object while

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offline, and viewing a client version of the file if it conflicts with the remote server version in connection with preserving truth on the client.

44. A computer readable medium storing computer executable components of claim 1.